Reviewer’s report

Title: Disease identification based on ambulatory drugs dispensation and in-hospital ICD-10 diagnoses: a comparison.

Version: 3 Date: 11 September 2013

Reviewer: Niklas Schmedt

Reviewer’s report:

The authors re-submitted their manuscript on disease identification based on ambulatory drugs a second time and addressed the critical issues raised in the second peer-review. There are some additional minor comments.

Minor essential revisions:

1. Methods section, first paragraph.
Do these four insurance companies cover 2 million insured enrollees overall or does it refer to persons that were hospitalized at least once as indicated by the next sentence?

2. Results section, third paragraph and also later parts in the manuscript.
The authors are stating that “…, justifying the use of drug-based information for morbidity indicators”. Since the thresholds were defined more or less arbitrarily, they only justify the use of this information according to the author’s definition of Kappa thresholds. This should be clearly stated, at least in the discussion.

3. Results sections. Page 13, second paragraph.
I suggest using “morbidity prevalence” instead of “morbidity prevalence rate”. In addition, it could be briefly stated in the results section which prevalence agreed well with the literature and which did not.

4. In conclusion, further research should also focus on a more detailed validation (e.g. using medical records or other data that are more reliable than hospital diagnoses alone) of these drug-based algorithms. This should be stated.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.